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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/047,216	01/14/2002	Arihiro Takeda	1117.66107	5771
7590	09/07/2005			EXAMINER
Patrick G. Burns, Esq. GREER, BURNS & CRAIN, LTD. Suite 2500 300 South Wacker Dr. Chicago, IL 60606			DUONG, THOI V	
			ART UNIT	PAPER NUMBER
			2871	
DATE MAILED: 09/07/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/047,216	TAKEDA ET AL. <i>me</i>
	<b>Examiner</b>	<b>Art Unit</b>
	Thoi V. Duong	2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on 20 June 2005.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 8-12 and 33 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) 8-12 is/are allowed.  
 6) Claim(s) 33 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1.) Certified copies of the priority documents have been received.  
 2.) Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3.) Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date: _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date: _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

## **DETAILED ACTION**

1. This office action is in response to the Amendment filed June 20, 2005.

Accordingly, claim 33 was amended, and claims 1-7 and 13-32 were cancelled.

Currently, claims 8-12 and 33 are pending in this application.

### ***Response to Arguments***

2. Applicant's arguments with respect to claim 33 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 33 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification does not disclose an orientation control element locally provided near an edge of the first substrate. As shown in Figs. 4 and 13, the slit pattern 25 or the protrusion pattern 26 is locally provided near an edge of the pixel electrode 15 and constitutes an orientation control element of the edge of the pixel electrode 15.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claim 33 is rejected under 35 U.S.C. 102(b) as being anticipated by Yamahara et al. (Yamahara, USPN 5,844,649).

As shown in Figs. 16 and 21, Yamahara discloses a liquid crystal orientation method of liquid crystal molecules of a liquid crystal layer 8 in the liquid crystal display device 51 comprising a first substrate 12 having thereon a pixel electrode 55 and an active element TFT 58, a second substrate 9 having thereon an opposed electrode 54, and said liquid crystal layer 8 interposed between said first and second substrates with said electrodes facing each other, said method comprising the steps of:

giving, as shown in Figs. 21 and 22, by an orientation control element (14a or 14b) locally provided near an edge of said first substrate 12 (Fig. 16), a first orientation regulating force in a direction parallel to the orientation control element (liquid crystal molecules 61 parallel to the side wall of the control element) to counteract a second orientation regulating force F given by the signal-electrode lines 56 and the scanning electrode lines 57 when voltage is applied between said pixel and opposed electrodes (col. 16, line 55 through col. 17, lines 19; and see also Fig. 20); and

giving a third orientation regulating force that orients the liquid crystal molecules 61 of said liquid crystal layer in a predetermined direction different from the directions of said second orientation regulating force as shown in Figs. 22(a) and 22(b).

***Allowable Subject Matter***

7. Claims 8-12 are allowed.

The following is an examiner's statement of reasons for allowance: none of the prior art of record fairly suggests or shows all of the limitations as claimed. Specifically,

Re claim 8, none of the prior art of record discloses, in combination with other limitations as claimed, a first orientation control element locally provided near an edge of the pixel electrode on the first substrate and giving an orientation regulating force to liquid crystal molecules near the edge of the pixel electrode on said first substrate, the orientation regulating force counteracting ,an orientation regulating force given by the edge of said pixel electrode to said liquid crystal molecules of the liquid crystal layer, so that said liquid crystal molecules including those near said edge are oriented in a substantially the same direction, when difference in orientation direction among said the liquid crystal molecules adjacent to each other near said edge is caused by the orientation regulating force given to the liquid crystal molecules of said liquid crystal layer by said edge of said pixel electrode when voltage is being applied between said pixel and opposed electrodes.

The most relevant reference, USPN 6,567,144 131 of Kim et al. (Kim), fails to disclose or suggest a first orientation control element locally provided near an edge of the pixel electrode on the first substrate. As shown in Figs. 7 and 8, the Kim's reference

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discloses that a first orientation control element 171 provided near an edge 19 of the pixel electrode 20 is formed on the second substrate 100.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(x).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(x).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(x) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thoi V. Duong whose telephone number is (571) 2722292. The examiner can normally be reached on Monday-Friday from 8:30 am to 4:30 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim, can be reached at (571) 272-2293.

Thoi Duong



08/26/2005



DUNG T. NGUYEN  
PRIMARY EXAMINER